

Serial No. 09/627,253

A21  
--In the particular embodiment shown, LIM card 320 includes a Presence Registration Request (PRR) stop action process 952, that is functionally similar to PRR process 902 described above. PRR 952 is adapted to generate and SCCP-encapsulate an accounting message that is subsequently passed via IMT bus 310 to ASIM 910 of the accounting and billing subsystem, where accounting and billing subsystem processing occurs in a manner similar to that described above.--

IN THE CLAIMS:

Please amend the claims as follows:

- A22
- sub B1
1. (Amended) A method for updating presence information regarding an end user in a presence server database based on information derived from a telephony-related action, the method comprising:
- (a) receiving a signaling system seven (SS7) message in response to a telephony-related action performed by an end user;
  - (b) determining, based on the SS7 message, whether presence registration processing is required for the end user;
  - (c) in response to determining that presence registration processing is required for the end user, automatically generating a presence registration message including presence information indicating to other end users a communication medium for contacting the end user using a messaging protocol and indicating that the end user is currently available to receive messaging protocol messages via the communications medium; and
  - (d) transmitting the presence registration message to the presence server over an IP network.
- A23
6. (Amended) The method of claim 1 wherein automatically generating a presence registration message includes automatically generating a presence protocol message.

A23

7. (Amended) The method of claim 1 wherein automatically generating a presence registration message includes automatically generating a session initiation protocol (SIP) message.

8. (Amended) The method of claim 1 wherein automatically generating a presence registration message includes automatically generating an instant messaging and presence protocol (IMPP) message.

11. (Amended) A method for processing a query to a presence server database, the method comprising:

A24

(a) receiving, at presence registration and routing node, an IP message for determining presence information for a first end user, the presence information indicating a communication medium for contacting the first end user using a messaging protocol and the fact that the first end user is currently available to receive messaging protocol messages via the communications medium;

(b) formulating a query to a presence database for obtaining the presence information;

(c) obtaining the presence information from the presence database; and

(d) forwarding the presence information to a second end user, wherein the second end user uses the presence information to determine the appropriate communication medium for contacting the first end user using the messaging protocol and the availability of the first end user to receive messaging protocol communications via the communications medium.

A25

14. (Amended) The method of claim 11 wherein forwarding the presence information to a second end user includes forwarding a presence protocol message to the second end user.

15. (Amended) The method of claim 14 wherein forwarding a presence protocol message includes forwarding a notify message to the second end user.

22. (Amended) A presence registration and routing node for updating presence information regarding an end user in a presence server database, the presence registration and routing node comprising:

- A26
- (a) a communication module for receiving an SS7 message relating to an end user and for determining whether presence registration processing is required for the SS7 message; and
  - (b) a presence server message generator for, if the communication module determines that presence registration processing is required, for receiving a copy of the SS7 message and for automatically generating a presence registration message including presence information indicating to other end users a communication medium for contacting the end user and the fact that the end user is currently available to receive messaging protocol messages via the communications medium.

23. (Amended) The presence registration and routing node of claim 22 comprising an advanced database communication module for encapsulating the presence registration message in an IP packet and transmitting the IP packet to a presence server over an IP network.

24. (Amended) The presence registration and routing node of claim 22 wherein the presence registration message is a session initiation protocol (SIP) message.

25. (Amended) The presence registration and routing node of claim 22 wherein the presence registration message is a presence protocol message.

26. (Amended) The presence registration and routing node of claim 22 wherein the presence registration message is an instant messaging and presence protocol (IMPP) message.

A27

29. (Amended) A presence registration and routing node for updating presence information regarding an end user in a presence server database, the presence registration and routing node comprising:

Serial No. 09/627,253

A27

- (a) a communication module for receiving an SS7 message from an SS7 network; and
- (b) a presence server message generator for generating a presence-server-compatible message for updating presence information regarding an end user in a presence server database, based on the SS7 message, wherein the SS7 message is a message from a mobile switching center (MSC).

A28

35. (Amended) A presence registration and routing node for providing presence information regarding an entity, the presence registration and routing node comprising:
- (a) an advanced database communications module for receiving an IP-encapsulated presence-server-compatible message for determining presence information for a first end user, the presence information indicating a communication medium for contacting the first end user using a messaging protocol and the fact that the first end user is currently available to receive messaging protocol messages via the communications medium; and
  - (b) a presence server message processor operably associated with the advanced database communications module for forwarding the presence-server-compatible message to a presence server for determining the presence information, wherein the presence server stores the presence information for the first end user and responds to the presence-server-compatible message, thereby informing a second end user of the appropriate communications medium for contacting the first end user using messaging protocol communications and whether the first end user is currently available to receive messaging protocol messages via the communications medium.